48. The method of claim 44 or 46, wherein hardening comprises exposing the polymer to an agent selected from the group consisting of ions, pH changes, and temperature changes.

49. The method of claim 48, wherein hardening comprises allowing the polymer to interact with ions selected from the group consisting of copper, calcium, aluminum, magnesium, strontium, barium, tin, and di-, tri- or tetra-functional organic cations; anions selected from the group consisting of low molecular weight dicarboxylic acids, sulfate ions and carbonate ions.

50. The method of claim 44, wherein the cells are selected from the group consisting of cells that form cartilage, cells that form bone, muscle cells, fibroblasts, and organ cells.

51. The method of claim 50, wherein the cells that form cartilage comprise chondrocytes.

52. The method of claim 50, wherein the cells that form bone comprise osteoblasts.

Remarks

New claims 44-52 are supported by material throughout the specification, especially originally filed claims 1-18, page 2, lines 15-17, and page 12, lines 13-15, discussing an injectable three-dimensional structure. In addition, it would be clear to one skilled in the art that the methods disclosed in the application, for example, at page 12, lines 21-38, would result in the formation of a cross-linked lattice throughout which cells are evenly distributed. Originally filed claim 1 clearly encompasses claim 44, in which hardening is completed after implantation and may be commenced beforehand. No new matter is introduced.

Applicant submits that new claims 44-52 are patentable in view of U.S. Patent No. 5,294,446 to Schlameus, *et al.* (Schlameus). Applicant submits that Schlameus neither discloses nor renders obvious introduction of a cell-polymeric composition into an animal and hardening a polymer in the composition to form a continuous three-dimensional structure, wherein hardening is completed following introduction into the animal, as recited in claim 44. Instead, Schlameus discloses an implant comprising a disc formed at least partially of pre-existing microcapsules containing osteoprogenitor cells. These microcapsules range up to about 1mm in diameter (Table 1) and encapsulate the cells in a hydrogel matrix that is hardened *in vitro* during formation of the microcapsule (column 1, lines 32-36, see also U.S. Patent No. 4,391,909 to Lim). In contrast, the implants of the instant invention are formed as integrated constructs having cells evenly dispersed throughout. Formation of an exemplary construct is described in the